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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/987,385 | 11/14/2001 | Toshiharu Hayashi | 2001_1697A | 7018 |

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EXAMINER

RUTHKOSKY, MARK

ART UNIT PAPER NUMBER

1745

DATE MAILED: 06/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/987,385

Applicant(s)

HAYASHI ET AL.

Examiner

Mark Ruthkosky

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

The examiner has approved the drawings, filed on 11/14/2001.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 3 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Yoshizawa et al. (US 6,132,900.)

The instant claims are to a lid for a secondary battery comprising a plate-shaped body formed with a hole; a cylindrical sealing member having a flange portion at one end and inserted into the hole; and a rivet inserted in the sealing member and calked to join the terminal member and insulating member to the plate shaped body.

Yoshizawa et al. (US 6,132,900) teaches a lid for a secondary battery comprising a plate-shaped body formed with a hole. A cylindrical sealing member having a flange portion at one

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end is inserted into the hole. A rivet is further inserted in the sealing member and calked to join the terminal member and insulating member to the plate shaped body (see figure 1; see claim 17 for the caulking sealant.) An electrode lead ribbon is connected to the rivet to conduct electrons from the electrode assembly. Thus, the claims are anticipated.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 11167909

A in view of Saito et al. (US 5,586,993.)

The instant claims are to a lid for a secondary battery comprising a plate-shaped body formed with a hole; a terminal member and an insulating member superposed in a peripheral edge of the hole with the insulating member arranged under the terminal member; a cylindrical sealing member having a flange portion at one end and inserted into the hole; and a rivet inserted in the sealing member and calked to join the terminal member and insulating member to the plate shaped body. The sealing member comprises a flat plate having a hole to form the flange portion and a cylindrical portion that is separate from the flange portion.

JP 11167909 A teaches a lid for a secondary battery comprising a plate-shaped body formed with a hole; a rivet terminal member and an insulating member superposed in a peripheral edge of the hole with the insulating member arranged under the terminal member; a

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cylindrical sealing member having a flange portion at one end and inserted into the hole; and a rivet inserted in the sealing member. The sealing member comprises a flat plate having a hole to form the flange portion and a cylindrical portion that is separate from the flange portion (see figures 1-4.) The reference further teaches that the sealing member can be made from fluororesins.

The reference does not teach the members to be caulked to join the terminal member and insulating member to the plate shaped body. Saito et al. (US 5,586,993), however, teaches a lid for a secondary battery comprising a plate-shaped body formed with a hole; a rivet terminal member and an insulating member superposed in a peripheral edge of the hole with the insulating member arranged under the terminal member; a cylindrical sealing member having a flange portion at one end and inserted into the hole; and a rivet inserted in the sealing member. The Saito reference teaches that the hole of the lid is caulked in order to seal and fix the rivet to the cover plate (col. 3, lines 45-end, col. 7.) It would be obvious to one of ordinary skill in the art at the time the invention was made to caulk the terminal member and insulating member to the plate shaped body as caulking the members will allow for a strong, durable seal between the components of the lid in order to prevent interaction between elements of the interior and exterior environments of the battery casing. Sealing components of a battery lid by caulking is broadly known in the art for this purpose. The artesian would have found the claimed invention to be obvious in light of the teachings of the references.

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Examiner Correspondence

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1193. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Ruthkosky whose telephone number is 703-305-0587. The examiner can normally be reached on FLEX schedule (generally, Monday-Thursday from 9:00-6:00.) If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached at 703-308-2383.

The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Mark Ruthkosky

Patent Examiner

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Mark Ruthkosky
6/11/03